

REMARKS

Reconsideration and allowance of the above identified application are respectfully requested. Claims 1-12 are now pending, wherein claims 1-10 have been amended and claims 11 and 12 have been added.

Claim 1 is rejected under 35 USC §102(b) as allegedly being anticipated by Japanese Patent No. JP 11-014482 to Kurio et al. ("Kurio"). This ground of rejection is respectfully traversed.

Kurio does not anticipate Applicants' claim 1 because Kurio does not disclose all of the elements of Applicants' claim 1. For example, Kurio does not disclose "a silicon oxide film covering said diaphragm and sealing said etch channel" as recited in Applicants' claim 1. Additionally, Kurio does not disclose that "a polysilicon film with a first side covering part or all of said silicon oxide film and a second side exposed to an environment of the pressure sensor" as recited in Applicant's claim 1.

Kurio disclose an electrode static capacity pressure sensor. The Office Action relies upon diaphragm 111 and oxide film 103 of Kurio as corresponding to the diaphragm and silicon oxide film, respectively, recited in Applicants' claim 1. However, the oxide film 103 does not cover the diagram and seal the etch channel as recited in Applicants' claim 1. Initially, it is noted that Kurio does not disclose that the diaphragm 111 has an etch channel. Accordingly, Kurio cannot disclose that a silicon oxide film seals the etch channel.

Moreover, it is respectfully submitted that Kurio does not disclose that the oxide film 103 seals the diaphragm 111. For the Examiner's convenience paragraph 37 of Kurio is provided to assist in the understanding of Kurio.

On the impurities diffusion layer 102, the oxide film 103 to the same of LOCOS formation use is formed selectively by the thermal diffusion (is formed on a predetermined portion). Or, after the oxide film has formed on all surfaces, according to the dry etching manner the patterning may be carried out (the process (c) in Fig. 3).

Accordingly, Kurio discloses that the oxide film 103 is formed selectively, and hence, it does not seal the etch channel of a diaphragm.

Additionally, Kurio does not disclose that "a polysilicon film with a first side covering part or all of said silicon oxide film and a second side exposed to an environment of the pressure sensor" as recited in Applicant's claim 1. The Office Action relies upon moving electrode 104b as allegedly corresponding to the polysilicon film recited in Applicants' claim 1. However, moving electrode 104b of Kurio is between element 105 and oxide film 103, and not exposed to an environment of the pressure sensor as recited in Applicants' claim 1.

Because Kurio does not disclose all of the elements of Applicants' claim 1, Kurio cannot anticipate Applicants' claim 1. Accordingly, withdrawal of the rejection of Applicants' claim 1 as allegedly being anticipated by Kurio is respectfully requested.

Claims 2-4 are rejected under 35 USC §103(a) as allegedly being unpatentable over Kurio. This ground of rejection is respectfully traversed.

Claims 2-4 variously depend from Applicants' claim 1. As discussed above, Kurio does not disclose all of the elements of Applicants' claim 1. Moreover, it is respectfully submitted that Kurio does not suggest all of the elements of Applicants' claim 1. Accordingly, Kurio cannot render Applicants' claim 1 obvious. Hence, Kurio cannot render Applicants' claims 2-4, which depend from Applicants' claim 1, obvious. Therefore, withdrawal of the rejection of Applicants' claims 2-4 as allegedly being obvious in view of Kurio is respectfully requested.

Claims 5-9 are rejected under 35 USC §103(a) as allegedly being unpatentable over Kurio in view of U.S. Patent No. 5,544,529 to Mitani ("Mitani"). This ground of rejection is respectfully traversed.

The combination of Kurio and Mitani does not render Applicants' claim 5 unpatentable because the combination does not disclose or suggest "a silicon oxide film covering said diaphragm and sealing said etch channel" and "a polysilicon film with a first side covering part or all of said silicon oxide film and a second side exposed to an environment of the pressure sensor" as recited in Applicants' claim 5.

As discussed above with regard to Applicants' claim 1, Kurio does not disclose or suggest a silicon oxide film which covers a diaphragm and seals the

etch channel or a polysilicon film with a second side exposed to an environment of the pressure sensor. Moreover, it is respectfully submitted that Mitani does not remedy these deficiencies of Kurio.

Because the combination of Kurio and Mitani does not disclose or suggest all of the elements of Applicants' claim 5, the combination cannot render Applicants' claim 5 unpatentable. Claims 6-9 variously depend from Applicants' claim 5, and hence, are patentable distinguishable over the combination of Kurio and Mitani for at least those reasons stated above with regard to Applicants' claim 5. For at least those reasons stated above, it is respectfully requested that the rejection of claims 5-9 as allegedly being obvious in view of the combination of Kurio and Mitani be withdrawn.

Claim 10 is rejected under 35 USC §103(a) as allegedly being unpatentable over Kurio in view of U.S. Patent No. 6,388,279 to Sakai et al. ("Sakai"). This ground of rejection is respectfully traversed.

The combination of Kurio and Sakai does not render Applicants' claim 1 unpatentable because the combination does not disclose or suggest "a silicon oxide film arranged over the diaphragm in order to seal the etch channels" as recited in Applicants' claim 10.

For similar reasons to those discussed above with regard to Applicants' claims 1 and 5, Kurio does not disclose or suggest a silicon oxide film which is

arranged over the diaphragm and which seals the etched channels. Additionally, it is respectfully submitted that Sakai does not remedy this deficiency of Kurio.

From a review of the response to Arguments section of the Office Action, it appears that the Office Action is asserting that the claimed relationship between the silicon oxide film and the diaphragm is an intended use and not a structural feature. It appears that the Office Action is relying upon the cases cited in MPEP §2115. In one of those cases, *In re Casey*, the MPEP discusses an apparatus claim which recites a machine which is used for handling adhesive tape. The MPEP states that an obviousness rejection was upheld because adhesive tape handling was not expressly or inherently required by the structure of the reference which rendered claim obvious.

Unlike the machine which processes tape discussed in *In re Casey*, Applicants' claim 10 recites a relationship between the silicon oxide film and the diaphragm. Specifically, claim 10 recites that the silicon oxide film is arranged over the diaphragm in such a manner to seal the etch channels of the diaphragm. Because claim 10 recites a relationship between the silicon oxide film and the diaphragm of the semiconductor pressure sensor of claim 10, and not an intended use for the semiconductor pressure sensor as asserted by the Office Action, it is respectfully submitted that the reasoning provided in the response to Argument section of the Office Action is not applicable to Applicants' claim 10.

Because the combination of Kurio and Sakai does not disclose or suggest all of the elements of Applicants' claim 10, the combination cannot render

Applicants' claim 10 unpatentable. Accordingly, withdrawal of the rejection of Applicants' claim 10 as allegedly being obvious in view of the combination of Kurio and Sakai is respectfully requested.

New claims 11 and 12 depend from Applicants' claim 10, and hence, are patentably distinguishable over the rejections of record for at least those reasons stated above with regard Applicants' claim 10.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #056207.50378US).

Respectfully submitted,

August 6, 2004



Jeffrey D. Sanok
Registration No. 32,169
Stephen W. Palan
Registration No. 43,420

CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844

JDS/SWP/lvb
331443